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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,597	07/05/2001	Wei Hsin Yao	SEA2655/30874.64USC1	8390

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EXAMINER

MARKOFF, ALEXANDER

ART UNIT

PAPER NUMBER

1746

DATE MAILED: 03/19/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/899,597	YAO ET AL.	
	Examiner	Art Unit	
	Alexander Markoff	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 March 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 16-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07/05/00 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s) _____   |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)            | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>7</u> | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Election/Restrictions*

1. Claim 15 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in Paper No. 11.

2. Applicant's election without traverse of claims 1-14 and 16-29 in Paper No. 11 is acknowledged.

~~Priority~~

### *Priority*

3. It is noted that the specification recites priority to two different US Provisional Applications SN 60/078,550 and 60/078,625.

It is noted that both provisional Applications have a different inventive entity compare with the instant Application.

It is also noted that the second provisional Application has no common inventors with the instant Application.

This raises a question who is the actual inventor. How can the Applicants claim the priority to the application filed by somebody else?

The Applicants should to provide explanation regarding discrepancies in the inventorship to avoid possible rejections under 35 USC 102 (f and/or g).

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***Drawings***

1. The drawings are objected to because of the reasons set forth on the attached PTO 948. Correction is required.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-14 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-14 are indefinite because it is not clear what is referenced as "the nature of the surface". It is also noted that this term lack proper antecedent basis.

Claim 7 is indefinite because the term "rigid" is relative term.

Claims 9 and 10 are indefinite because the term "the laser output" lacks proper antecedent basis.

Claims 6, 12 and 27 are indefinite because the term "effectively" is a relative term.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3-8, 10-12, 16, 18-23, and 25-28 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 60-219,637.

JP 60-219,637 teach a method and apparatus for cleaning and smoothening a surface of magnetic disks.

The method comprises directing laser light to irregularities to reduce them to a predetermined amount.

This reference discloses the size of the regularities prior to and after the process. It means that the step of detecting and means for detecting are disclosed by the reference.

The reference also discloses the use of different power of the laser.

Since the irregularities are reduced it is inherent that the used power and time are sufficient to reduce the irregularities.

#### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 2, 9, 17 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 60-219,637 in view of Kuo et al (IEEE Transactions on Magnetics, 32, No 5, 3753-3758), Baumgart et al (IEEE Transactions on Magnetics, 31, No 6, 2946-2951), and Engelsberg (US Patent No 5,024,968).

JP 60-219,637 teach a method and apparatus for cleaning and smoothening a surface of magnetic disks.

The method comprises directing laser light to irregularities to reduce them to a predetermined amount.

This reference discloses the size of the regularities prior to and after the process. It means that the step of detecting and means for detecting are disclosed by the reference.

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The reference is silent regarding whether or not the used laser is a pulsed laser. However, the use of pulsed lasers was conventional for cleaning and surface modification as evidenced by Kuo et al, Baumgart et al, and Engelsberg.

It would have been obvious to an ordinary artisan at the time the invention was made to use a pulsed laser in the method and the apparatus of JP 60-219,637 with reasonable expectation of adequate results in order to use conventional and readily available equipment because the use of the pulsed lasers was conventional for surface cleaning and machining.

10. Claims 13, 14 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 60-219,637.

JP 60-219,637 teach a method and apparatus for cleaning and smoothening a surface of magnetic disks.

The method comprises directing laser light to irregularities to reduce them to a predetermined amount.

This reference discloses the size of the regularities prior to and after the process. It means that the step of detecting and means for detecting are disclosed by the reference.

The reference teaches focusing the laser on the irregularities. The used focusing device comprises a lens (4).

The reference is silent regarding the detailed construction of the focusing device and thereby fails to specifically recite the use of mirrors and optical fibers.

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However, the use of mirrors and optical fibers was notoriously well-known in the art to transfer light beams (including laser light beams) to the desired location.

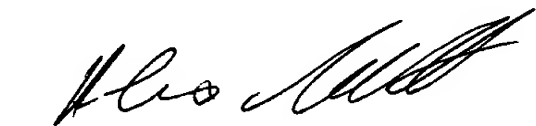
It would have been obvious to an ordinary artisan at the time the invention was made to use these conventional devices in the method and apparatus of JP 60-219,637 for their conventional purpose with reasonable expectation of adequate results in order to deliver the light from the source to the object to be treated.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Markoff whose telephone number is 703-308-7545. The examiner can normally be reached on Monday - Friday 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on 703-308-4333. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7719 for regular communications and 703-305-7718 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



Alexander Markoff  
Primary Examiner  
Art Unit 1746

am  
March 17, 2003

**ALEXANDER MARKOFF  
PRIMARY EXAMINER**